

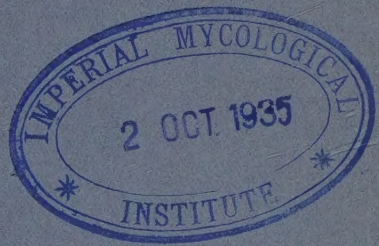
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GOVERNMENT OF NORTHERN IRELAND
MINISTRY OF AGRICULTURE

MONTHLY REPORT

SEPTEMBER, 1935



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MINISTRY OF AGRICULTURE, NORTHERN IRELAND.

MONTHLY REPORT, SEPTEMBER, 1935.

AGRICULTURAL NOTES.

The return of more settled weather conditions at the beginning of September was very welcome and enabled harvesting operations, which had been temporarily suspended on account of the rough weather at the end of August, to be pushed forward. Should the weather continue to favour this work, grain crops will be saved in good condition and earlier than usual this season. Then, another fact to be appreciated in this connection, farmers will be given an earlier opportunity of digging the potato crop, providing it has sufficiently matured.

A special feature of this month's issue is the article on the cost of milk distribution, which compares the distributive margin under the English Milk Scheme with that under the Northern Ireland Scheme.

Advice to fruit growers on the harvesting of apples is given on page 11.

September and October are two important months for sheep breeders, and their attention is drawn to the notice on page 29 regarding the arrangements the Ministry has made for issuing permits for the importation into Northern Ireland of breeding sheep purchased at the principal Scottish sheep sales to be held during these two months.

The preliminary statement showing the acreages under the principal varieties of potatoes in Northern Ireland this season is published on page 12.

Detailed particulars regarding the working of the Beef Subsidy Scheme also will be found in this report, as well as the latest information available regarding the operations of the Wheat Act.

The current prices payable under the Pigs Marketing Scheme also appear, and another permanent feature, "Seasonal Farm Notes," should be referred to for general information concerning work on the farm at this time of the year.

AGRICULTURAL CONDITIONS AT THE 1ST SEPTEMBER, 1935.

During the first three weeks of August the weather conditions were dry and warm, but during the last ten days heavy showers of rain fell and cooler conditions prevailed, especially at night time, when several sharp frosts occurred. The continuance of favourable weather during the greater part of the month was much appreciated in that it allowed harvesting operations, which had begun earlier than usual this year, to be pushed forward with all speed. Since the arrival of unsettled weather harvesting work has been somewhat interrupted, but, on the other hand, the rainfall has remedied the position in regard to the shortage of water for flax retting operations, which was a considerable handicap to many farmers this year. Pastures, too, have benefited from the rains after the long period of drought. It is also reported that the aftermath made very poor growth owing to the dry weather conditions. On account of the bareness of pastures hand feeding had to be carried out on a larger scale than usual this year. Adequate supplies of all classes of food stuffs continued to be available at prices which were a little easier on the month.

Notwithstanding the shortage of grass, cattle have made a fairly good thrive, but there is little doubt that their progress would have been more noticeable and the milk yield larger had moister weather been experienced earlier in the month.

Sheep are in fair condition, but here again the bareness of pastures and the shortage of water has evidently affected normal progress.

Live stock, as a general rule, have been maintained in a healthy condition.

THE CROPS.

WHEAT.—The harvesting of this crop was carried out under ideal conditions and with satisfactory results. Good, sound, standing crops of wheat were easily cut, and this work was practically completed and a large percentage of the crop has been stacked. Autumn sown wheat is reported to have given more satisfactory returns in so far as the grain is concerned than spring sown crops, whilst the returns of straw are stated to be on the light side in some areas. In general, however, the crops have given entire satisfaction and the yields should be fully up to the average in dimensions.

OATS.—This crop ripened two or three weeks earlier than usual this year on account of the long spell of dry, warm weather, but harvesting operations in some areas have not been advanced accordingly, as the extra demands made on the farmers' time in connection with the harvesting of the increased acreage of the flax crop has retarded progress with the harvesting of oats. The bulk of the crop was,

however, harvested during the exceptionally good weather at the earlier part of the month, and although the heavy showers of rain that have since fallen have caused lodging of some standing crops and will delay harvesting further in late districts, the returns, on the whole, should give satisfaction. The drought and the strong sunshine caused premature ripening, particularly in oats growing on light soils, and the fact that in many fields the crops were over-ripe and the straw consequently broken was another explanation why harvesting occupied a longer time than usual this year. On the whole, however, the oat crop has given very good results and the pickle is reported to be fairly well filled in most districts, although on light soils the straw is rather on the short side owing to the drought during the later stages of the growing period.

BARLEY.—Barley grew out well and good, standing crops were the general rule. Harvesting was carried out under the ideal weather conditions prevailing, and the greater portion of the crop was cut during the month. On the whole, average yields of grain are expected, but in the case of some very good crops the yields will be above the average.

FLAX.—Considerable difficulties were experienced with retting operations this year on account of the scarcity of water following the long spell of drought, and in many cases farmers were compelled by the shortage of water to leave their crop in stooks in the field for a considerable time after pulling. It is also reported that in many cases water was so scarce that the same water was used for retting two or three different lots of beets. Other accounts indicate that the farmers had to go a considerable distance to procure water for retting operations. It is satisfactory to note, however, that the crop has given the best returns for some years, and although scutching has not yet commenced it is most likely that the yields will be above the average. The straw generally is reported to be of good length and of considerable bulk.

POTATOES.—The lifting of the early varieties has been practically completed. The early crop has given a satisfactory yield of good quality tubers. Whilst the prospects of the main crop also are encouraging, the drought retarded normal development of the tubers. On the other hand, the absence of rain was to a considerable extent responsible for delaying the appearance of blight, which seems to have given little cause for complaint this year. Little damage should, therefore, result from this disease, especially among crops where spraying was carried out to schedule. On the whole, the main crop varieties should give good yields, although the average may be a little lower than last season.

Supplies of the early varieties of potatoes marketed for local consumption decreased during the month, and prices continued to fall, and for the week ended 7th September they averaged $2/6\frac{1}{2}$ per cwt.

Main crop varieties have been reaching the markets in larger quantities since the middle of August, and average prices, which opened at 4/3 per cwt., had declined to 3/5 per cwt. by the first week of September.

Shipments of potatoes to Great Britain during August were maintained at the same level as for the previous month.

The preliminary statement showing the acreages under the principal varieties of potatoes in Northern Ireland this year is printed on page 12.

MANGELS.—The roots made slow but steady growth during the drought, and since the rains a noticeable improvement has taken place. Prospects of good average yields are at the moment very bright.

TURNIPS.—The growth of turnips, which had been fairly well maintained during the long spell of dry weather, got a much needed stimulus from the rains which fell at the end of last month, and the crops, especially those sown early, are in a very promising state. Crown rot has attacked some fields of turnips in County Down, but elsewhere the position seems to be entirely satisfactory.

HAY.—Rarely has there been a better season for harvesting operations. Hay was saved in excellent condition, and although estimates of the yield vary, the reports are generally agreed on the excellence of the quality of the crops. Meadow hay is expected to give an average yield, and whilst the returns from first crop hay on light soils may be a little disappointing, on heavy soils they are reported to be well up to the average. Hay cut for seeding has also been saved in excellent condition. Threshing has commenced and is proceeding apace. From results so far obtained the yield of seed is, however, reported to be less satisfactory than last season, but it is as yet rather early to give a general estimate of yield. Small lots of perennial and mixed grass seeds marketed towards the end of August were selling at rather low prices of from 11/- to 12/- per cwt. in the case of the former, and round about 10/- per cwt. in the case of mixed seed.

LIVE STOCK.

CATTLE.—All classes of cattle have been maintained in fairly good condition. The burnt up conditions of pastures in some areas has naturally retarded the progress of cattle, and in some areas hand feeding has been carried out on a larger scale than usual at this time of year. The general health is, on the whole, good, but a few outbreaks of red water have been reported and also a few cases of milk fever.

The principal attraction at fairs were good young dairy stock, which were in limited supply.

SHEEP.—The flocks are in a fairly good healthy condition. Maggots however, are still proving a source of trouble in some districts.

Supplies of sheep at fairs showed the usual seasonal increase, and on the whole business was fairly good. The best trade was done in ewes for breeding and lambs for feeding.

PIGS.—The supply of young pigs was plentiful last month and trade was on a fairly even keel throughout at steady rates. Sows were offered in excess of demand and remained a dull trade.

HORSES.—The horse trade continues brisk, and good animals suitable for farm work are making up to £45, while second class farm horses are obtainable at from £15 to £30.

MILK.—The milk yield is reported to have been adversely affected by the drought, but there were no complaints of a shortage. Creameries paid unchanged rates of from 2½d. to 4d. per gallon for milk delivered, the separated milk being returned to the farmer.

The average price paid for all milk produced in Northern Ireland and delivered to creameries for manufacturing purposes was 3.34d. per gallon for the month of July, 1935, and the Ministry has made equalisation payments at 1.66d. per gallon in order to bring the average price in respect of this month to 5d. per gallon as provided by the Milk and Milk Products Act (Northern Ireland), 1934.

It should be noted that under the Regulations creameries are required to distribute the equalisation payments in accordance with the butter-fat content of the milk received from each supplier. Farmers should, therefore, bear in mind that the actual payments made to them, being calculated on a butter-fat basis, may be at a rate per gallon which may vary below or above the average figure herein notified.

THE MARKETS DURING AUGUST.

With the exception of cabbage, supplies of the principal vegetables marketed last month were larger than in July. Decreased supplies of cabbage were 2½d. dearer at 1/8½ per dozen. Leeks and parsley were more plentiful than in July and ¼d. per bunch cheaper at 7d. and 9½d. per bunch, respectively. Considerably increased supplies of carrots, parsnips and vegetable turnips were marketed in Belfast during the month. Carrots and parsnips were almost unchanged in price at 8/- and 7/7 per cwt., respectively, whilst vegetable turnips were 10d. dearer at 2/10 per cwt. Small supplies of cauliflowers marketed at this centre during August averaged 2/2 per dozen. Farmers' print butter was more plentiful and ½d. dearer at 11½d. per lb., whilst a greatly increased quantity of farmers' lump butter was

slightly easier on the month at $9\frac{1}{2}$ d. per lb. Supplies of hen eggs were slightly larger than in the preceding month and prices were dearer. The average quotation was $8\frac{3}{4}$ d. per lb., as compared with 6d. per lb. in July. Duck eggs were in smaller supply and $\frac{2}{4}$ dearer at $9\frac{5}{5}$ per 120.

In the poultry markets there were greatly increased numbers of hens and chickens, while ducks also were more numerous than in July. Hens were $\frac{1}{4}$ d. cheaper at $1/6\frac{1}{4}$ each, chickens 3d. cheaper at $1/11$ each, and ducks 1d. cheaper at $1/9\frac{1}{2}$ each. Supplies of long unwashed wool, mountain unwashed wool and down wool were smaller than in July. Long unwashed wool and mountain wool were unchanged in value at $4\frac{3}{4}$ d. and 4d. per lb., respectively, but down unwashed wool was $\frac{1}{2}$ d. dearer at 5d. per lb.

THE COST OF LIVING INDEX FIGURE.

The cost of living index figure at 1st August was 43 or the same as that for the previous month. The figure at 1st August, 1934, was 42.

THE COST OF MILK DISTRIBUTION.

The question of the distributive margin in the sale of milk is too large and too controversial to be dealt with exhaustively in a brief article. It is not the purpose, therefore, of this article to enter into the wider issues of the problem and to deal with such matters as are suggested by the much abused word "rationalisation." It will confine itself entirely to questions of fact and will consider first: What place distributive margins have in the Northern Ireland milk scheme; and, secondly, What differences there are between margins under the Northern Ireland scheme and under the English milk scheme, respectively; thirdly, it will try to account for these differences and finally draw any conclusions that are suggested when the differences have been accounted for.

Whereas, at its inception, the English milk scheme made no attempt to regulate methods of milk distribution, the Northern Ireland milk scheme was constructed on the assumption that the consumer could not reap the benefit of the improved quality of milk produced in Northern Ireland unless the distributive trade came to some extent under the control of the scheme. An authority on the public health aspects of the milk industry has described distribution as "the bottle-neck of the industry": obviously it is no use to ensure that milk in the bottle is clean if there are germs in the bottle-neck. Hence, distributors who were prepared to sell Grade B milk were required to maintain at their premises a certain standard of cleanliness and to instal apparatus for the purpose of cooling and bottling their milk. As a corollary to these requirements the Milk and Milk Products Act

empowered the Joint Milk Council to fix minimum retail prices and thereby prevent the undercutting by producer-retailers which had made the distributive trade a somewhat speculative and risky business in the past. The English milk scheme—which had in its first contract period taken no more control of the retail price, and, therefore, of distributive margins, than to insert a clause in the wholesale contract to the effect that milk must not be sold at a price “below the prevailing retail price”—came in the second contract period to fix a minimum distributive margin, and in the third contract period to fix retail prices. The phrase “below the prevailing retail price” was found to be too vague and elastic to safeguard distributors from undercutting, and hence, like the Northern Ireland scheme, the English scheme has provided for fixing minimum retail prices and, in consequence, distributive margins. A comparison, however, of distributive margins under the two schemes reveals a marked difference between them. Two tables are supplied in this connection—No. 1 on page 10 and No. 2 on page 11. Table 1 shows the various prices determined by the Joint Milk Council for Northern Ireland in the County Borough of Belfast during the periods:

- (a) 16th December, 1934, to 12th May, 1935,
and
- (b) 12th May, 1935, to 31st August, 1935.

The last column shows the distributive margin on every gallon of each grade of milk during each of these periods. Table 2 shows the prices determined by the English Milk Board for towns of over 25,000 inhabitants in England and Wales during the third contract period. This period is divided up for purposes of comparison into a summer and winter period, and the average prices for each of these periods is shown in the table. The fourth column shows the distributive margin on every gallon of milk sold on these conditions. The last column shows the extent of the difference between the distributive margin under the Northern Ireland scheme and the distributive margin under the English scheme. Attention may be drawn, first, to the fact that under the Northern Ireland scheme prices are fixed for three grades of milk, and under the English scheme prices are fixed for all milk, irrespective of quality. Hence, in Northern Ireland there are two distributive margins—in the winter period a margin of $9\frac{1}{2}$ d. for milk of grades A and B, and one of $7\frac{1}{2}$ d. for milk of Grade C. In England there is a common distributive margin of $11\frac{1}{2}$ d. on all milk sold in the winter period in the towns in the region in question. The difference between the margins on every gallon sold under the schemes amounts, therefore, to 2d. on grades A and B and 4d. on Grade C. In attempting to account for these differences it is necessary to be on guard against any hasty conclusion of such a kind as that distributors in Northern Ireland are getting less than they ought to get, or that distributors in England are getting more than they ought to get. A meal of bread and cheese may be had far more

cheaply at a coffee stall than at a luxurious hotel. While the bread and cheese may or may not be of inferior quality, it is obvious enough that one of the main reasons for the difference in price is that far more elaborate service is provided at the hotel. Similarly with the distributive margin. Before drawing any conclusions it is necessary to consider what services these respective margins represent and the costs and expenses which they cover. These services vary with different businesses. As the Grigg Commission pointed out, the complexity of distributive businesses makes it very difficult to apportion expenses among the various services which distributors provide.

There is first the fundamental service of carrying the milk from the station or depot to the consumer. The costs involved include wages, insurance, fuel, repairs and depreciation. The Grigg Commission estimates that costs of distribution vary widely between 3d. and $7\frac{1}{2}$ d. per gallon. This variation may be due to the position of the firm's premises, to the size of the business, and to the number of rounds per day. It is clear, therefore, that the margin of $7\frac{1}{2}$ d. prescribed indirectly by the determined retail price for Grade C milk is just sufficient to cover the maximum costs of distribution providing a percentage of net profit which varies according to circumstances.

Next come the services involved in bottling. The Grigg Commission suggests that costs of pasteurising and bottling show a considerable measure of uniformity, falling between 2d. and 3d. per gallon. The cost of pasteurising may be estimated at about $\frac{1}{3}$ rd of cost of bottling and pasteurising together. It is natural, therefore, that the distributive margin of Grade B milk, which under the scheme must be bottled and cooled, should be 2d. more than the margin on C milk, which may be sold loose.

There still remains, however, the 2d. difference between the maximum distributive margin under the Northern Ireland scheme and the normal distributive margin under the English milk scheme as shown by table 2. The difference is due principally to the fact that the milk distributors in London and the large towns of over 25,000 inhabitants in England provide an elaborate and costly service which would not be covered by a margin of 9d. a gallon. In many cases the customer requires delivery of milk in half-pint bottles, two deliveries a day, and deliveries at special times. The distributor is compelled to provide these services in order to retain the connection.

Apart from costly services, another point of difference is found in the nature of the contract between distributors and producers in the two countries. In Northern Ireland the distributor is able to contract for a stated quantity of a producer's output, and the quantity of milk which the producer cannot sell to the distributor has to be utilised by him at home or sent for manufacture at a creamery. Under the contract

approved by the Permanent Joint Milk Committee in England prior to the operation of the milk scheme it was agreed that the vendor should supply and the purchaser should purchase the whole of the milk produced by the vendor's cows. This form of contract has been adopted by the English Milk Board. The loss involved in having to manufacture seasonal surpluses of milk falls, therefore, on the distributor in England and on the producer in Northern Ireland. Consequently it is natural that the distributive margin under the English milk scheme should be greater than it is under the Northern Ireland scheme.

The difference between margins, therefore, is accounted for in a normal economic manner, and the comparison does not merit the conclusion that profits are either abnormally low in the case of Northern Ireland or abnormally high in the case of England. But one interesting conclusion remains to be drawn. According to the report for 1934 on the working of the Agricultural Marketing Schemes, the Consumers' Committee has complained that distributive margins under the minimum price arrangement of the third contract have not been low enough to make an allowance for the wide variations in the character and cost of the services rendered by different distributors. The Grigg Commission, moreover, had pointed out previously that high margins in England being due to costly services, it would be in the interests of the industry if the consumer were deprived of the special extra services and that he would suffer thereby no great inconvenience. The arrangements of the Northern Ireland Milk Scheme are interesting in this connexion. In the first place, the principle of differentiation contained in varying prices for different grades of milk instead of a flat rate for all qualities of milk has been applied to distributors' services, with the result that under the Northern Ireland scheme there are different distributive margins for the different grades of milk and, therefore, for different services. One outstanding danger of monopoly is that goods and services may be standardized in such a way and at such a price that the consumer must pay the price for the standard article or go without, i.e., coffee stalls may be merged in restaurants and hotels. The Northern Ireland milk scheme makes it possible for the consumer to have both coffee stall and hotel. He can have the cheap service under the Grade C regulations and he can have the more expensive service under the Grades A and B regulations. The principle of differentiation is carried still further in the provisions that milk sold by retail and collected by a customer from the shop may be bought at 4d. less than the minimum retail price.

Though pasteurisation is not required under the Northern Ireland scheme, since retail prices are not fixed rates, but minimum prices, there is nothing to prevent distributors from pasteurising their milk and charging more for this service. Hence, though the difference between the margins under the two schemes is accounted for by the fact that on the whole a more elaborate service is supplied by the

English distributor, it is to the credit of the Northern Ireland scheme that instead of fixing margins to cover the costs of the most elaborate services it fixes margins at a minimum and enables a consumer who is willing to accept or can only afford to pay for a less costly service to buy milk at a cheaper rate than the consumer in England and Wales.

The fixing of differential prices is to the advantage not only of the consumer, but also of the whole of the milk industry. One of the objects of the Milk Scheme is to increase the consumption of fresh milk. Since the demand for milk is elastic, which means that a slight increase in price will result in a falling off in demand, the danger of fixing retail prices at a higher level than the normal is that the consumption of liquid milk, particularly among the working classes, may decline. If so, the surplus of milk which has to be manufactured into butter at prices considerably lower than those received on the liquid milk market will correspondingly increase, and the producer will be in no happier position than he was, before measures were taken to assist him. By fixing differential distributive margins, varying according to whether an elaborate service or a minimum service is provided, the Milk Scheme for Northern Ireland avoids this danger. The working class consumer is not deprived of milk which he was able to buy before the Milk and Milk Products Act came into force, nor does it appear that consumption has fallen off to the detriment of the whole industry. In this particular the Northern Ireland Milk Scheme embodies the suggestion of the Grigg Commission and meets one of the most serious criticisms that has been levelled against the Scheme for England and Wales.

TABLE 1.

MILK PRICES DETERMINED FOR BELFAST BY THE JOINT MILK COUNCIL
IN THE WINTER AND SUMMER PERIODS, 1934-1935.

Period.	Grade.	Producer's Price.	Grade.	Retail Price.	Grade.	Distributive Margin.
		s. d.		Not less than		
16th Dec., 1934, to 12th May, 1935	A	1 4½	A	s. d. 2 2	A	9½d.
	B }	1 2½	B	2 0	B	9½d.
	C }		C	1 10	C	7½d.
12th May to 31st August, 1935	A	1 0½*	A	1 10	A	9½d.
	B }	0 10½	B	1 8	B	9½d.
	C }		C	1 6	C	7½d.

* For level deliveries,

TABLE 2.

AVERAGE PRICES DETERMINED BY ENGLISH MILK BOARD FOR TOWNS OF OVER 25,000 INHABITANTS IN ENGLAND AND WALES EXCLUDING LONDON AND TOWNS IN S.E. DISTRICT (3RD CONTRACT PERIOD).

Period.	Average Producer's Price.	Average Retail Price.	Average Distributive Margin.	Difference between N.I. & G.B. Margin.
	s. d.	s. d.		
1st October, 1934 to March, 1935* ..	1 4½	2 4	11½d.	2d. 2d. 4d.
April, 1935, to September 1935	1 1½	2 0	10½d.	1½d. 1½d. 3½d.

* During this period prices are the same for towns of over 25,000 in all regions of England and Wales, including London.

THE HARVESTING OF APPLES.

Owing to the severe frost which occurred in most of the fruit growing districts of Great Britain on the 16th and 17th May last, the crop of apples is reported to be below the average. Accordingly, it is believed that the demand for apples will be more satisfactory than it was last season. Growers of apples in Northern Ireland, particularly of the late varieties, such as Bramley's Seedling, should, therefore, take every precaution during the harvesting and storing of the crops to ensure that the fruit shall keep well during storage and remain in a condition such as will command the highest prices when offered for sale. Careless handling, during pulling and storing, is the cause of considerable loss to apple growers in Northern Ireland, and growers are earnestly advised to pay the utmost attention to these operations during the present season.

All vessels used to hold the apples during the process of pulling should be lined with some material, such as sacking, to prevent the apples from being bruised and damaged. On no account should apples be dropped into a vessel from a height no matter how the vessel may be lined or padded.

Apples are even more easily damaged than eggs, and what is most serious in the case of damage to apples is that the damage becomes apparent only after some time has elapsed, when the bruised tissues begin to rot and decay. Adequate care during the operations of pulling and storing will prevent bruising and consequent loss, and even if a little extra time is taken as compared with that when the work is done carelessly, it will be well repaid by the superior condition of the fruit at the time of marketing.

Only buildings which have been thoroughly washed and cleaned, and which can be kept free from dust, should be used for the storage of

apples. Other commodities such as hay, meals, etc., should not be stored in the building in which apples are to be kept, nor should farm animals be housed immediately adjacent to an apple store, as they raise the temperature of the store too high, and the high temperature will ripen the fruit prematurely and necessitate its early disposal. The store should have a floor made of clay or cement.

The apples are best stored in wooden cases or trays placed on top of one another in the store. A suitable receptacle is the deep egg case which was used for the marketing of eggs some ten to fifteen years ago. This type of case holds about 8 stones of apples, and the cases can be piled on top of one another to within a small space of the roof or ceiling of the store. In the piling of the cases of apples it is important to ensure that there is free circulation of air all round the cases. Apples continue to breathe after they are pulled, and, accordingly, require ventilation during storage to prevent suffocation followed by a breakdown of the tissues.

The storing of apples in heaps on the floor of the store is rarely successful, unless in the case of fruit which is to be marketed before Christmas; as, however, there is usually an increase in prices later in the season, it is best to store the apples of the late varieties in such a way as they will keep well until after that time.

Full particulars regarding the proper methods of picking and storing apples are given in Leaflet No. 79, a copy of which should be obtained by every commercial apple grower. Copies of this leaflet may be had, free on request, from the Ministry of Agriculture, Stormont, Belfast.

THE POTATO CROP, 1935.

Preliminary statement showing the acreage under the principal varieties of potatoes in Northern Ireland in 1935, with comparative figures for the years 1930-1934, inclusive:—

Varieties of Potatoes.				1935.	1934.	1933.	1932.	1931.	1930.
Arran Victory	..	..	I	50,539	51,895	53,467	54,516	51,174	49,547
Kerr's Pink	..	..	I	32,999	35,350	35,829	34,403	31,674	29,586
Arran Banner	..	..	I	8,831	7,057	4,962	2,029	850	350
British Queen	..	..	N	7,604	8,452	8,024	8,095	7,565	8,291
Arran Consul	..	..	I	7,515	6,986	6,875	7,024	5,128	4,651
Up-to-Date	..	..	N	7,468	11,411	11,622	13,248	16,406	18,526
Arran Chief	..	..	N	4,479	5,636	6,473	8,040	8,104	9,411
Epicure	..	..	N	2,214	2,527	2,550	2,827	1,245	1,528
Champion	..	..	I	1,375	1,728	2,497	2,938	3,166	3,661
Irish Queen	..	..	I	1,300	1,691	2,406	2,928	4,379	5,055
Majestic	..	..	I	998	582	306	169	138	226
Other Varieties	..	..		3,693	4,006	4,010	5,571	4,374	5,462
TOTALS	..	..		129,015	137,321	139,021	141,788	134,203	136,294

I=Immune. N=Non-immune.

The area under potatoes in Northern Ireland for the year 1935 shows a decrease of 8,306 acres or 6.0 per cent. as compared with the year 1934. Similar figures for England and Wales, Scotland and the Irish Free State show, respectively, decreases of 24,900 acres or 5.1 per cent., 11,000 acres or 7.7 per cent., and 5,000 acres or 1.3 per cent.

Of the total area under potatoes in Northern Ireland, viz., 129,015 acres, 105,663 acres or 82 per cent. are of varieties immune to Black Scab or Wart Disease.

The following table shows the percentage of the total area planted with immune varieties for the period 1926 to 1935, and it will be observed that there has been a steady increase in the acreage under immune varieties in each year from 1926.

1935.	1934.	1933.	1932.	1931.	1930.	1929.	1928.	1927.	1926.
% 82	% 78	% 78	% 76	% 74	% 70	% 69	% 68	% 63	% 60

Arran Victory and Kerr's Pink were again the most popular varieties grown, accounting for 39 per cent. and 26 per cent., respectively, of the total area. Both varieties show decreases, Arran Victory 1,356 acres and Kerr's Pink 2,351 acres as compared with the previous year.

Arran Banner, Arran Consul and Majestic were the only main varieties grown on an increased acreage in 1935 as compared with 1934. The acreage under Arran Banner increased by 1,774 acres or 25 per cent., under Arran Consul by 529 acres or 7.6 per cent., and under Majestic by 416 acres or 71 per cent. A substantial decrease of 3,943 acres or 34.6 per cent., however, occurred in the acreage under the Up-to-Date variety, and this variety appears to be rapidly passing from favour, as the acreage has steadily declined since 1923, in which year it was grown on 43,210 acres.

CATTLE INDUSTRY (EMERGENCY PROVISIONS) ACTS, 1934 AND 1935.

An article published by the Cattle Committee on the working of the cattle subsidy during the 3rd quarter of the period during which it has been in operation, viz., March to May, 1935, reveals the fact that the total number of cattle certified during this period was rather higher at 417,331 in comparison with 380,805 for December, 1934, to February, 1935, and 361,021 for the first three months of the scheme, September to November, 1934. In other words, the number for the spring period was $9\frac{1}{2}$ per cent. higher than the winter period and $15\frac{1}{2}$ per cent. greater than the autumn period, while the number for the

winter months recorded an increase of almost $5\frac{1}{2}$ per cent. on the figure for the three autumn months. These figures, of course, include carcasses of cattle certified on a dead weight basis. The total number of animals certified on a live weight basis during the months March, April and May last was 406,904. Of this total, 262,475 cattle were certified in England or $64\frac{1}{2}$ per cent. of the total certified in the United Kingdom; 16,998 or $4\frac{1}{4}$ per cent. in Wales; 95,120 or $23\frac{1}{4}$ per cent. in Scotland, and 32,311 or 8 per cent. in Northern Ireland. The percentage for England was the same as in the six months September, 1934, to February last, that for Wales declined from $7\frac{1}{2}$ per cent. to $4\frac{1}{4}$ per cent., while that of Scotland increased from $21\frac{1}{2}$ per cent. to $23\frac{1}{4}$ per cent., and Northern Ireland from $6\frac{1}{2}$ per cent. to 8 per cent.

On a comparison of the numbers of fat cattle certified in the different agricultural divisions during the three seasons for which returns are available, it is noticed that the north-eastern division of England (Norfolk, Lincoln and the East Riding of Yorkshire) showed heavily increased marketings in the winter as compared with the autumn, and increased its marketings in the spring by over 90 per cent. compared with the winter, and there were two and a half times as many fat cattle marketed in this division in the spring as in the autumn.

The eastern counties of England also showed an appreciable increase in the spring, but there was relatively little change in other parts of England except in the east midland division, which showed a decrease of over 25 per cent. in the winter as compared with the autumn quarter and a further decrease of 28 per cent. in spring as compared with winter. On the eastern side of Scotland and in Northern Ireland marketings showed progressive increases in each quarter, but the winter increase in Wales was not maintained in the spring.

The following are the numbers of animals certified at live weight certification centres for the months of the 3rd quarter reviewed.!

Agricultural Division.	Month.	Steers.	Heifers.	Cow Heifers.	Totals.
Northern Ireland	March	7,862	2,161	278	10,301
	April	9,666	2,226	308	12,200
	May	7,614	1,927	269	9,810
Scotland	March	20,829	7,403	313	28,545
	April	25,946	8,088	338	34,372
	May	24,187	7,657	359	32,203
England	March	51,270	26,608	3,603	81,481
	April	61,062	27,766	3,822	92,650
	May	59,622	25,059	3,663	88,344
Wales (including Monmouth) ..	March	4,227	2,467	285	6,979
	April	3,631	2,138	244	6,013
	May	2,282	1,504	220	4,006
TOTAL United Kingdom	Spring Period	278,198	115,004	13,702	406,904

The relative numbers of fat steers and heifers sold showed comparatively little variation from month to month from September to December, 1934, when heifers accounted for between 43 and 45 per cent. of the certified cattle, and steers for between $51\frac{1}{2}$ and 54 per cent. By the end of February, however, the proportion of heifers had decreased to $33\frac{1}{2}$ per cent., and steers had increased to 63 per cent., and the proportion of heifers continued to decline until, in May, there was a slight movement in favour of heifers. The proportion of cow heifers has remained steady at between 3 and 4 per cent. The percentages of the totals of the foregoing table are as follows:—

		Steers. per cent.	Heifers. per cent.	Cow-heifers. per cent.
March, 1935	..	66.2	30.3	3.5
April, 1935	..	69.3	27.5	3.2
May, 1935	..	68.5	28.1	3.4

Much the larger proportion of the cattle fattened in the eastern, north-eastern and east midland divisions of England, in North Wales, in all parts of Scotland and in Northern Ireland, were steers. In the northern division of England, where considerably more heifers than steers were fattened in the grass season, the preponderance of steers in the 3 months referred to was very marked.

The average live weights of the fat cattle during the third quarter were—March, 1935, 9 cwt. 2 qr. 8 lb.; April, 9 cwt. 2qr. 6 lb.; and May, 9 cwt. 1 qr. 26 lb. For the first six months of the scheme the average weight was 9 cwt. 2 qr. 8 lb. as compared with 9 cwt. 2qr. 4 lb. for the next three months and 9 cwt. 2qr. 6 lb. for the whole nine months period. Detailed particulars of the average weights are as under:—

	Six months, September, 1934, to February, 1935.	Three months, March to May, 1935.	Nine months, September, 1934, to May, 1935.
	cwt. qr. lb.	cwt. qr. lb.	cwt. qr. lb.
England and Wales	9 2 10	9 2 7	9 2 9
Scotland ..	9 3 2	9 3 12	9 3 6
Northern Ireland	8 2 14	8 1 14	8 2 1
United Kingdom ..	9 2 8	9 2 4	9 2 6

With regard to prices, it is stated that the returns show that the prices of fat cattle, which were declining in January and February, 1935, continued to fall until the end of March and then began to rise steadily. Average prices in March and April, 1935, were lower than in February, but there was a sharp increase in May which brought prices back to about the January level.

The following are average prices per live cwt. over the periods mentioned :—

	England and Wales.		Scotland.		Northern Ireland.		United Kingdom.	
	s.	d.	s.	d.	s.	d.	s.	d.
March, 1935	33	5	36	1	29	10	33	9
April, 1935	33	11	36	0	29	8	34	2
May, 1935	35	5	37	5	30	11	35	7
Average for 3 months, March to May, 1935	34	4	36	8	30	3	34	7
Average for 9 months September, 1934, to May, 1935	34	8	38	0	30	9	35	2

Subsequent statistical returns received from the Cattle Committee show that average prices during the fourth quarter of the subsidy year were higher than in the third quarter (March to May). The weekly returns of payments made from the cattle fund record a steady rise in the average prices of fat cattle up to the end of June, and although there has been a gradual decline in values since about the 3rd week of July, prices in the main have been better than during March, April and May.

Payments made to Northern Ireland owners of cattle under the Acts up to and including 31st August, 1935, on which date the first year of the subsidy ended, amounted to £216,809 11s. 3d., and were in respect of 102,616 animals. This represents an average payment of £2 2s. 3d. for each head of cattle certified. The payments to Northern Ireland owners during the week ended 31st August were in respect of 2,052 steers, 721 heifers, and 52 cow heifers. These 2,825 animals weighed 23,273 cwt. and realised the total price of £35,052 19s. The average price of each animal was £12 8s. per head or 30/1 per live cwt. The average weight was 8 cwt. 0 qr. 27 lb., and the average subsidy obtained was £2 1s. 2d.

Turning to the Ministry's records, it is noted that the total number of Northern Ireland cattle certified during the fourth quarter of the

first year of the cattle subsidy ended 31st August was 27,713. This figure is considerably smaller than that for the 3 spring months ended 31st May and slightly below that for the 3 winter months. The monthly returns were—June, 9,093 ; July, 9,532 ; and August, 9,088.

THE PIGS MARKETING SCHEME.

DEAD PIG PRICES FOR SEPTEMBER.

The Pig Industry Council for Northern Ireland have announced that the prices for dead pigs for sale by producers to curers in Northern Ireland in September will be as follows :—

GRADED PIG CARCASSES.

Weight Class.	Weights.	Thickness of Shoulder Fat in inches.			Price per cwt.		
		Grade A	Grade B	Grade C	Grade A	Grade B	Grade C
I	c.1.1.14 to c.1.2.14	1½ -1¾	2 -2½	2½ -2¾	60/2	57/2	54/2
II	c.1.2.15 to c.1.3.14	1¾ -2	2½ -2¾	2¾ -2¾	60/2	57/2	54/2
III	c.1.3.15 to c.2.0.0	1½ -2½	2½ -2¾	2¾ -2¾	57/2	54/2	51/2
IV	c.2.0.1 to c.2.0.14	1½ -2½	2½ -2¾	2¾ -2¾	51/2	48/2	45/2

The price for partly black pigs between c.1.1.14 and c.2.0.14 will be 5/- per cwt. below the relevant grade price.

Authorised cuts :—

- (a) Broken ham (dry, shank and/or shell bone Break)—5% of the gross value of the carcase.
- (b) Broken ham (wet break)—12½% of the gross value of the carcase.
- (c) Shoulder-stuck carcasses—3/- per shoulder affected.

The gross value of a carcase is the product of the dead weight and the relevant Grade or other price per cwt.

Where a pig carcase weighing between c.1.1.14 and c.2.0.14 is diseased and the fact could not reasonably have been known to the producer at the time of slaughter the full Grade price applies where the carcase can be graded. Where such a pig carcase cannot be graded because it is wholly condemned it shall be paid for at Grade B prices.

UNGRADED PIG CARCASSES.

Code Mark.	Weights.	Defects.	Price per cwt. according to weight class.
UL	c.1.1.14 to c.2.0.14	Under Grade A measurements	6/- below relevant Grade B price
UF	c.1.1.14 to c.2.0.14	Over Grade C measurements	6/- below relevant Grade B price

The foregoing prices do not apply in the case of (a) wholly black pigs, boars, rigs or stags, sucked sows, and pig carcasses weighing under c.1.1.14 or over c.2.0.14, and (b) pigs visibly diagnosable as diseased before slaughter and subsequently condemned; emaciated or screw pigs; smelling pigs with definite indications of putrefaction and pigs badly abused or damaged before being delivered by the producer to the curer.

LIVE PIG PRICES FOR SEPTEMBER.

The Pigs Marketing Board have announced that the following prices will apply as from 1st September, 1935, until further notice :—

Live Weights.						Grade I.	Grade II.	Grade III.	Unsuitable		
cwt. qr.		lbs.		cwt. qr.		lbs.		per live cwt.	per live cwt.	per live cwt.	per live cwt.
Wiltshire.											
1	2	0	to	1	3	14	51/6	49/-	46/6	41/-	
Shipping.											
1	3	15	to	2	1	14	46/6	43/9		41/-	
2	1	15	to	2	2	7	44/-	41/6		38/6	
2	2	8	to	2	2	21	40/6	38/-		34/6	

The above prices are subject to a deduction of 2/6 per pig marketing expenses in addition to the usual levies.

These prices do not apply to live pigs outside the above weights, to live pigs intended for breeding, to live boars, live sucked sows, rigs or stags, injured or diseased pigs, live in-pig gilts, nor to live pigs sold (on contract registered with the Board) to curers in Northern Ireland. All live pigs to which the above prices apply can be sold only to the Board.

Light-Weight pigs—c.1.2.0 to c.1.3.14—will be graded according to their suitability for the Wiltshire Trade, and any of these which are not suitable for one or other of the three grades will be purchased at the price for medium weight pigs unsuitable for shipping, viz., 41/- per cwt.

Pigs over c.1.3.14 and up to c.2.2.21 will be graded according to their suitability for the shipping trade.

The Pigs Marketing Board also announced that the standard price (for Grade II pigs of dead weight c.1.0.14 to c.1.2.7) which will be payable for live Wiltshire pigs delivered under direct contracts during the month of September is 61/7 per dead cwt.

Grade I pigs of the above weights will be paid a bonus of 4/- per dead cwt (65/7), and Grade III pigs will be subject to a "cut" of 4/- per dead cwt. (57/7).

COST OF STANDARD PIG RATION.

The average retail cash price per cwt. of the standard ration for the sixteen weeks period 6th May to 24th August, 1935, as calculated by the Ministry was 7/2½. This price is used, together with the realised prices of bacon and hams and of fresh meat over a set period, to determine the standard price of pigs for September.

The following is the ration upon which the feeding cost is based :—

Barley Meal	..	..	..	..	30%
Maize Meal	..	..	..	..	40%
Pollards (White)	..	..	..	..	20%
Extracted Soya Bean Meal	..	..	..	..	5%
Meat and Bone Meal (60% Protein)	..	..	..	..	5%

GRADING STATISTICS.

Table showing the percentages of pig carcasses falling within the weight and grade classes indicated during July, 1935.

GRADE A.				GRADE B.				GRADE C.				TOTAL.
1	2	3	4	1	2	3	4	1	2	3	4	
18.21	11.27	1.40	.25	16.02	16.39	2.49	.61	6.49	8.15	1.10	.24	82.62
UNGRADED CARCASSES.												
Under Grade A. measure- ments. U.L.	Over Grade C. measure- ments. U.F.	Wholly condemned. U.		Wholly black injured or damaged. U.		Overweights underweights boars, sows. X.		Partly black. Y.				
.03	4.53	.06		2.78		9.87		.11				17.38
TOTAL												100%

The number of carcasses purchased for curing in July was the smallest since March last. The reduction was accounted for by the holiday week, for which the returns showed a considerable drop in purchases. The average price of pork in July was 59/8 per cwt., and each carcass averaging 1 cwt. 2 qr. 13 lbs. fetched an average price of £4 16s. 3d.

THE PIGS MARKETING SCHEME (NORTHERN IRELAND), 1933.

It will be recollected that in February, 1934, elections took place to the Pigs Marketing Board from every county in Northern Ireland. It is provided in the Scheme that every two years thereafter elections shall take place for three counties, and accordingly an election of members for the administrative counties of Fermanagh, Londonderry and Tyrone will be held in February next year. Producers are, however, reminded that if they wish to have the right to vote at this forthcoming election they should be registered with the Pigs Marketing Board on the first day of November next. An application form for registration can be obtained from the Secretary, Pigs Marketing Board (N.I.), State Building, Arthur St., Belfast.

WHEAT ACT, 1932.

FINAL DEFICIENCY PAYMENT TO WHEAT GROWERS FOR 1934-35.

The Wheat Commission are now preparing the final payments due to wheat growers, under the Wheat Act, for the third cereal year, which ended on the 31st July. Advances on account have already been made to growers on four occasions. The final payment will be a payment of the balance in the case of those growers who have already received an advance; but the full amount for the year will be paid in the case of those growers who have not been paid an advance on account.

As a preliminary step, the Minister of Agriculture and Fisheries has made an Order, on the advice of the Wheat Commission, prescribing two figures on which the calculation of the payments to growers has to be based. By this Order the Minister has prescribed 4s. 10.873d. per cwt. as the "ascertained average price" of home-grown millable wheat, at farm, obtained by registered growers in 1934-35. The Order also certifies that the quantity of home-grown millable wheat sold by registered growers in 1934-35 was 35,920,000 cwts.

The Wheat Act specifies 10s. per cwt. as the "standard price." A registered grower is entitled to receive from the Wheat Commission a "deficiency payment" for each cwt. of wheat sold by him, representing, subject to two provisos, the difference between the "ascertained average price" and the "standard price." The two provisos are,

firstly, that a deduction has to be made from the deficiency payments to defray the costs of administration, and, secondly, that if the quantity of wheat certified by the Minister to have been sold by registered growers in the cereal year exceeds the quantity taken to be the anticipated supply for the year, the quantity of the wheat sold for which deficiency payments are to be paid shall be reduced proportionately for each grower.

The difference between the ascertained average price (4s. 10.873d. per cwt.) and the standard price of 10s. is 5s. 1.127d. per cwt. From the latter figure, the Wheat Commission have decided to deduct 0.527d. per cwt. to cover administrative expenses for 1934-35. Therefore, the deficiency payment for 1934-35 will be 5s. 0.6d. per cwt.

It is here that the second statutory proviso referred to comes into operation. The quantity certified as sold is 35,920,000 cwts. This quantity is in excess of the maximum of 27,000,000 cwts. for which, in accordance with the Wheat Act, deficiency payments may be paid in any cereal year. 27,000,000 cwts. is 75.167 per cent. of 35,920,000 cwts.; therefore, under the Act, each grower is to receive deficiency payments in respect of 75.167 per cent. of the quantity of certified sales credited to his account. This is the same thing as saying that each grower is to receive 75.167 per cent. of the deficiency payment, that is 3s. 9.55d. per cwt. in respect of all of the certified sales credited to him.

It is to be noted that the average amount received by registered growers as a whole, by way of market price plus deficiency payment, in respect of all certified millable wheat, will be 8s. 8.423d. per cwt. for the cereal year 1934-35. The deduction for administrative expenses for 1934-35 is equivalent to about 0.39d. per cwt., reckoned on the total quantity certified as sold.

The comparative figures for the first three cereal years are :—

	1934-35.	1933-34.	1932-33.
Ascertained average price per cwt.	s. d. 4 10.873	s. d. 4 7.63	s. d. 5 4.46
Millable wheat certified as sold	cwts. 35,920,000	cwts. 29,570,000	cwts. 20,400,000
Administrative expenses per cwt. certified as sold	d. 0.39	d. 0.475	d. 0.66
Wheat Commission's payment to growers per cwt. certified as sold	s. d. 3 9.55	s. d. 4 10.3	s. d. 4 5½
Average amount per cwt. (market price, plus deficiency payment) received by growers for all wheat certified	8 8.423	9 5.93	9 9.71

The Wheat Commission expect to be able to send out the cheques for final payments about the 14th September. It will be understood that those registered growers who have already received an advance on account for any wheat at the rate of 3s. per cwt. will be paid only the balance of 9.55d. per cwt. in respect of that wheat.

SEASONAL FARM NOTES.

WHEAT, OATS AND BARLEY.—The early harvest this year and the fine weather have enabled farmers to make good progress with the saving of these crops. Stacking should be completed at the earliest opportunity, as prolonged exposure in stooks results in considerable damage and loss being caused. The stacks should be thatched as soon as possible after being built, otherwise waste may occur should wet weather supervene.

POTATOES.—The lifting and storing of early and second-early crops of potatoes should be carried out as soon as possible now. The separation of the saleable potatoes from the chats and diseased tubers at lifting time does not involve much extra labour and is well worth while. If storing in pits is practised, the potatoes should be well thatched with a layer of straw before earthing up is done so as to ensure that they will be in a clean, dry condition when lifted. Rushes should not be used for thatching potato pits, as this practice may lead to the seeds of the rushes being spread and ultimately to the appearance of these weeds in the field.

In some districts it is still customary to utilise potato stalks to cover potato pits temporarily. This practice is frequently the cause of the spread of disease throughout the pit and of many of the tubers rotting during storage. A light covering of dry straw is quite sufficient to protect the potatoes from damage until the pits are earthed up.

The seed for next season's crop may be selected and placed direct into sprouting boxes at lifting time. The boxing of seed potatoes is strongly recommended, as it has been proved that it aids in obtaining heavier yields and cleaner crops.

MANGELS.—The lifting and storing of mangels should be proceeded with during this month before frosts appear; very little frost is sufficient to cause damage to these roots and to impair their keeping quality. The clamp should be made convenient to the farmyard and covered with a thick layer of rushes, ditch cuttings or old grass.

LEA GROUND.—Ground intended for ploughing should be kept closely grazed from now onwards. Close grazing previous to ploughing is an aid in preventing attacks of insect pests such as wireworms and leather jacket grubs,

STUBBLE GROUND.—The early harvest has afforded an excellent opportunity to clean stubble ground intended for potatoes and roots. Cultivating or harrowing with a spring-tined harrow will destroy many surface weeds and also facilitate the production of a good tilth next spring.

PASTURE.—Fields on which the grass has shot, or on which there are coarse tufts of uneaten grass, will benefit considerably from top-mowing when time permits. In addition, a run of the chain harrow to spread the droppings of manure is well worth while, as it prevents the growth of unpalatable coarse tufts in the pasture next season.

LIVE STOCK.

SHEEP.—The selection of the breeding flock of sheep is of particular importance at this time. The results to be obtained next season depend largely on the skill and judgment exercised in the selection of the flock. While the ewes should be sound, healthy, and have good mouths and udders, it is to the selection of the ram that special attention must be paid. The best possible ram should only be chosen, and a little extra money spent on the purchase of a superior animal will be well repaid by the better quality of the lambs produced. Readers are reminded that a premium system for rams is in operation in all counties, and farmers in the vicinity of premium holders should take the opportunity of having some of their ewes mated with these superior animals at a nominal fee. Further particulars of this scheme can be obtained from the Secretary of the Committee of Agriculture for the County.

Before turning the rams with the ewes, the wool around the tails of the latter should be clipped, and the breast of the ram smeared with keel or other colouring matter so that the date of service may be known. The colouring should be mixed with lard or grease. On no account should it be mixed with oil, as, besides damaging the fleece, it will harden and become useless. When mixed with lard or grease, however, the keel remains soft and one application lasts a considerable time. By changing the colour of the keel every third week, ewes returning to service can be recognised and the period during which lambing will take place can be noted.

The flushing of ewes prior to and at mating time is a sound practice. It should be remembered, however, that ewes which are too fat are generally poor breeders. The best results are obtained from ewes which are in a forward, thriving condition at mating time, so that a change from moderately poor conditions to those which encourage a state of thriving is the object to be aimed at in flushing. A field of aftermath is excellent for this purpose. Useful hints on the care and management of sheep are given in Leaflets Nos. 47 and 63.

Although this season has not been favourable to the spread of Liver Fluke disease among sheep, yet timely measures should be adopted to prevent any possible losses that may occur. Particulars regarding the prevention of this disease are given in Leaflet No. 24.

CATTLE.—Where attacks of “husk” or “hoose” are likely to occur, young cattle should be housed at night and not allowed out until the dew is off the grass in the mornings. A small allowance of concentrates, such as a mixture of equal parts crushed oats, maize meal and decorticated earthnut cake, is also beneficial. Useful information on the control of this malady is given in Leaflet No. 80.

Cattle intended for fattening during the coming winter should be fed more liberally from now onwards. They should be given, while still on pasture, up to 3 lb. per head daily of a ration of concentrates. A suitable meal mixture consists of 2 parts by weight crushed oats, 1 part by weight maize meal and 1 part by weight decorticated earthnut cake.

Autumn-born calves are best kept indoors and not allowed out on grass until the following spring. Well-ventilated, well lighted houses, which are easily kept clean, are essential if the calves are to thrive properly throughout the winter. Full particulars relating to the feeding and management of calves are given in Leaflet No. 54.

Grass at this time of year has lost much of its feeding value, and, to maintain milk yields, cows will require supplementary feeding. Examples of suitable meal mixtures to use for this purpose are given in Leaflet No. 16. Where supplies of cabbage are available, they provide a useful aid in maintaining the milk yield when the grass becomes scarce.

PIGS.—From reports received, it is evident that worm infestations in pigs are prevalent, and attention is again directed to the importance of adopting timely measures to control these pests. It is a sound practice to treat all pigs for worms after weaning. The extra expense involved will be well repaid in the better thriving results obtained. Oil of chenopodium has given very satisfactory results for the destruction of worms in pigs and is less expensive than many of the proprietary worm powders on the market. It should be mixed with raw linseed oil or castor oil in the proportion of 1 part oil of chenopodium to 19 parts of the latter. The pigs should be fasted for about 24 hours before dosing, allowing only water to drink. The amount of the dose to give depends on the weight of the pig, but for pigs about 8 weeks old, 1 tablespoonful of the mixture per head should be given. Older pigs up to 12 weeks of age should receive 2 tablespoonfuls each, while for pigs up to 15 weeks of age $3\frac{1}{2}$ tablespoonfuls are required per head. It is advisable to give the pigs a light, soft feed containing an allowance of Epsom salts about 6 hours afterwards. The amount of salts to

give is also dependent on the weight of the pigs, but for pigs about 8 weeks old, from $\frac{1}{2}$ to $\frac{3}{4}$ oz. of Epsom salts should be mixed with the food, this allowance being proportionally increased according to the weight and age of the pigs.

After dosing, it is imperative that the house be kept regularly and thoroughly cleaned out; damp and dirty houses are conducive to the spread of worms and nullify the effects of the treatment.

GARDEN AND ORCHARD.—Preparations should be made now for the planting out of cabbage plants raised from seed which was sown last July. These plants should be planted out before the end of September in ground which is not too rich, as the plants will stand the winter better under such conditions.

There is a probability of a scarcity of green vegetables occurring next spring, as was the case in the spring of 1934, and, accordingly, growers who have a supply of suitable plants available should plant as extensively as possible at this season.

As it is also probable that there may be a good demand for savoy cabbage and for broccoli next spring, every care should be taken of these crops to preserve them as much as possible.

Main crop celery should now be ready for earthing up. Too much soil should not be placed around the plants at any one time. It is best to place the soil around the plants on three or four different occasions when the plants are dry. The final moulding should be done towards the end of October and the soil made firm around the necks of the plants to prevent, as far as possible, water from lodging there or washing the soil down between the leaf blades. Before each moulding is carried out, the leaf blades should be tied together to keep the soil out of the hearts of the plants. The foliage of the plants should be sprayed every ten to twelve days with a solution made of—

1 lb. bluestone,
1 $\frac{1}{4}$ lb. washing soda, and
10 gallons water,

taking care to coat the young unfolding leaves thoroughly with the mixture so as to prevent an attack of celery leaf blight. If any plants become affected with the disease, they should be removed as soon as possible, as the disease spreads very rapidly, especially during damp weather.

The onion crop from seed sown in the spring should be ready for lifting at an early date. After the bulbs are lifted they should be dried in a shed or other well-ventilated structure where they will not get wet by rain or dew. When thoroughly dried they can be stored in a cool, airy place such as a loft or made into hanks and hung from a roof in a well-ventilated building.

POULTRY.—An important feature in successful poultry-keeping is the rigorous culling of the flock, and this is a suitable time to carry out such work. The pullet flock should be examined closely and any birds which are lacking in vigour, are deformed in any way, or are poorly developed should be culled out and discarded; such birds are never likely to be profitable. The age at which the pullets mature should also be noted, as those which commence laying at a very early age are usually small-bodied, extremely active birds which lay a large number of small-sized eggs. Such birds should also be culled out, or marked with distinctive rings, so that they may be disposed of after they have completed the winter laying period. On no account should they be retained for breeding purposes. The best layers in the flock are generally those which come into production after the earliest layers, but before the remainder of the birds have begun to lay.

Flocks of hens which have completed their first laying season should also be culled, and only the very best birds retained for breeding purposes. Undue prominence should not be given to egg records when selecting birds for the breeding pen. In this connection the following extract from the Report on the Ministry's Egg Laying Test for 1933-34 may be of interest.

“In selecting a hen for a breeding pen her egg production should not come first in the list of requirements. No other consideration should be allowed to interfere with selection for good health, vigour and stamina. Good body size must be the first consideration, and birds which are from large families, all of which are vigorous and have laid reasonably well, are vastly superior to stock from very high but isolated producers. Provided they are mated with a suitable cockerel, the birds which lay in the neighbourhood of 200 good sized eggs are likely to be as successful, if not more so, in the breeding of layers as those having exceptionally high records.”

“Egg recording will always be valuable in determining the laying capabilities of a strain and in identifying the poor producers and the layers of small, badly-shaped and badly-shelled eggs. Its value as a means of identifying suitable breeders will be determined by the manner in which the owners of recorded birds utilise the information the records provide.”

Further hints on the selection of laying and breeding stock are given in Leaflet No. 29.

It is of the utmost importance to ensure that the birds selected for breeding are not “carriers” of Bacillary White Diarrhoea disease. This disease is still responsible for enormous losses among chicken flocks where the hatching eggs have been obtained from untested stock, and the only means of controlling the disease is to have the

“ carriers ” detected by means of blood testing, and removed from the breeding flock. The blood testing of poultry flocks is at present being carried out, and particulars regarding the scale of fees in operation this season are given on page 29 of this report. Applications for the blood testing of flocks should be made immediately to the Poultry Instructor for the district.

The birds which have been selected for breeding purposes should be allowed free range, while the food given should be of a body-building nature, consisting largely of grain, bran and coarse pollards. No better use can be made of stubble ground, once the oats have been removed, than that of allowing the breeding stock free access to it. A wet mash should be given once daily, while an abundant supply of drinking water should also be provided.

The pullet flock should now be in their winter quarters, and the feeding should be such as will encourage egg production without undue forcing. A mash made up of ordinary cereals, with separated milk to drink, is excellent for bringing the birds into lay. Useful hints on feeding, along with examples of suitable meal mixtures to use, are given in Leaflet No. 3.

Now is a suitable time to hatch eggs of the heavy breeds with a view to obtaining early spring chickens for sale for table purposes.

ANNOUNCEMENTS AND REMINDERS.

The centres provisionally selected by County Committees of Agriculture for Winter Agricultural Classes to be held during the coming season, are :—

County Fermanagh	.. Brookeborough and Springfield.
County Londonderry	.. Kilrea and Blackhill.
County Tyrone	.. Dervaghroy, Doorock, Rouskey (Done- managh), Bready, Cloghfin and Tullaran.

Particulars regarding the duration of these classes, along with a syllabus showing the subjects dealt with are given in Leaflet No. 60. As only a limited number of pupils can be admitted to each class, those desiring to attend should make early application to the Secretary of the County Committee of Agriculture or to the Agricultural Instructor.

The next session at the Ulster Dairy School, Cookstown, and at the North West School, Strabane, commences on the 8th October. Particulars regarding the courses of instruction at these Schools are given on page 28 of this report.

The next session at Greenmount Agricultural and Horticultural College also commences on the 8th October.

The next inspection of boars for licences will take place during October. Applications for inspections should be lodged with the Ministry before 30th September. The boars eligible for inspection are those farrowed in April, May and June, 1935.

The autumn sheep dipping period extends this year from the 7th October to the 16th November.

Poultry-keepers are reminded of the show and sale of Utility Poultry which will be held under the auspices of the Royal Ulster Agricultural Society at Balmoral, Belfast, on the 27th and 28th September next. Classes are provided for (a) copper-ringed hens, (b) cockerels bred from copper-ringed hens at official Breeding Stations, (c) pullets bred from copper-ringed hens at official Breeding Stations. The Ministry will provisionally select cockerels which are of the standard required for poultry stations and premium cards will be displayed on the pens occupied by the selected birds. An auction sale of birds entered in the selling classes will take place during the Show and this provides a convenient means of obtaining suitable birds for breeding.

Copies of the leaflets mentioned in Farm Notes can be obtained free, on request.

TRAINING OF GIRLS IN POULTRY-KEEPING, DAIRYING, &c.

The Ministry has two schools, the North West School and the Ulster Dairy School, which provide for the training of girls.

The North West School is situated at Strabane, County Tyrone, and has accommodation for 24 pupils. The courses of instruction are designed to afford a sound practical training in modern economical methods of dairying, poultry-keeping and rural housewifery. Admission is by scholarship given by the County Committees of Agriculture, which includes free tuition, board and residence. Applications for such scholarships should be made to the Secretary of the Committee of Agriculture for the county in which the applicant resides.

The Ulster Dairy School is situated at Loughry, Cookstown, County Tyrone, and has accommodation for 50 pupils. It provides the most up-to-date training in all matters connected with women's sphere in farm life, including poultry-keeping, dairying and rural housewifery. Girls who show special ability are selected for a further period

of training with a view to qualifying as Instructors under the Schemes of Agricultural Education. The fees, for the ordinary school course of three terms, are only £3 : 3 : 0 per term.

The next session at both Schools will open on 8th October and early application for admission is essential.

Prospectuses of both Schools, containing application forms, can be obtained free from the Ministry on request.

BLOOD TESTING OF POULTRY FOR BACILLARY WHITE DIARRHOEA.

REDUCTION IN FEES.

As it is one of the essential provisions of the Ministry's scheme for the Registration of Accredited Poultry Farms that all adult birds on the farm must have satisfactorily passed the blood test for Bacillary White Diarrhoea, the Ministry has had under consideration the question of reducing the scale of fees for the blood testing of poultry in order that owners of large flocks may be enabled to comply with this provision without incurring undue expense. The following reduced scale of charges was accordingly introduced as from the 1st September, 1935.

First Tests. Up to 150 birds 3d. per test.
Over 150 birds 3d. per test for the first 150. 2d. per test for those in excess of 150.

Retests. A flat rate of 2d. per test up to any number.

It will be seen that under the new scale of charges 2d. instead of 2½d. per test is charged for birds in excess of 150 and it is hoped that this reduction, in addition to facilitating owners of large flocks who wish to have their farms registered, will encourage poultry breeders generally to adopt the only reliable method of combating this disease by having *all* adult birds on the farm tested and not the breeding stock only.

IMPORTATION OF SHEEP INTO NORTHERN IRELAND FROM SCOTLAND.

Provided no unforeseen circumstances arise, the Ministry will be prepared to admit breeding sheep from the following sales to be held in Scotland during September and October, subject to the salesmasters conducting the sales complying with certain conditions laid down by the Ministry.

An officer of the Ministry will be in attendance at each of the sales for the purpose of issuing permits for the importation into Northern Ireland of animals purchased thereat, and before making any purchases persons from Northern Ireland should get into touch with him in the saleyard.

These facilities are intended for breeders only who wish to retain the animals purchased at the sales for breeding purposes. All animals imported must be moved directly from the Northern Ireland port to the farms to which they are licensed by the Ministry's Inspector, where they are to be isolated and detained for a period of not less than 14 days.

It should be understood that these arrangements may be either modified or cancelled at any time if, in the opinion of the Ministry, the disease position in Great Britain should warrant the adoption of either course.

Persons interested should, if possible, communicate with the Ministry before going to the sales.

1. LAWRIE & SYMINGTON, LANARK.

10th September	Blackface Shearling and Lamb Rams.
17th and 18th September	All classes of ewes, Suffolk and Oxford Down Shearling and lamb rams, ewes, gimmers and ewe lambs.
24th September	Blackface ewes, also Leicester and Down Rams.
18th October	Blackface Rams and Lamb Rams.

2. J. CRAIG, LTD., AYR.

19th and 20th September	Blackface and Cheviot Hill ewes, and Blackface Gimmers.
26th and 27th September	Blackface Shearling and Ram Lambs, Blackface and Cheviot Hill Ewes, Leicester Shearlings and Ram Lambs, Ewes, Gimmers, &c.
3rd October	Blackface and Cheviot Hill Ewes, uncrossed Gimmers and Lambs.
10th October	Blackface and Cheviot Hill Ewes, uncrossed also Leicester, and Blackface Rams and Ram Lambs.

3. WALLETS AUCTION MART, CASTLEDUGLAS.

25th September	Cheviot and Blackface Ewes, Gimmers, &c., also Blackface Shearling and Ram Lambs.
2nd October	Cheviot and Blackface Ewes, Gimmers and Lambs.

4. McDONALD FRASER & Co., LTD., PERTH.

11th and 12th September Border Leicester, Oxford, Suffolk, and Shropshire Down Shearling Rams and Ram Lambs, Leicester and Down Ewes, and Gimmer Blackface Shearling Rams and Ram Lambs.

16th October Blackface Rams and Ram Lambs.

5. LIVE STOCK MARTS, LTD., STIRLING.

4th October Blackface Shearling Rams and Ram Lambs.

8th October Uncrossed Blackfaced Ewes.

6. WATSON AND BATCHELOR, AYR.

26th September Blackfaced and Cheviot Ewes.

3rd October Breeding Ewes and Rams and Ram Lambs.

SHEEP DIPPING (SPECIAL REGULATION) ORDER, 1935.

The Ministry has made an Order requiring the double dipping of sheep during the period 7th October to the 16th November this year. The Order further stipulates that the interval between each dipping must not be less than 7 or more than 14 days.

It should also be noted that all imported sheep will have to be dipped on two occasions as soon as practicable after importation.

THE ANIMALS QUARANTINE STATION.

The Ministry proposes to arrange for the opening of the Animals Quarantine Station at Belfast for the reception of pedigree breeding stock from England provided that sufficient applications are received to make up a consignment. Applications for accommodation and for the necessary permit to import should be made not later than the 30th September to the Secretary, Ministry of Agriculture, Stormont, Belfast.

MINISTRY'S EGG LAYING TEST AT STORMONT, 1934/35.

AWARD OF COPPER RINGS.

The above test ended on the 9th September and, in accordance with the Rules, all birds which laid at least 200 first grade eggs during the 48 weeks of the test period, not more than 50 eggs below first grade and which were passed by the judge as being of suitable type were

marked with sealed Copper Rings supplied by the National Poultry Council. Full particulars of the egg production of these birds will appear in the final report of the test which will be published by the Ministry and also in the Register of Laying Trials which will be published by the National Poultry Council.

The following are preliminary particulars of the birds which received Copper Rings :—

SECTION 1—WHITE WYANDOTTES.

Pen No.	Test No. of Bird.	Name and Address of Owner.	Copper Ring No.
1	1	Agricultural & Horticultural College, Greenmount	U 1/35
"	2	"	U 2/35
2	7	Mrs. R. J. Beck, Cleigh, Corbet, Banbridge	U 3/35
"	8	"	U 4/35
"	9	"	U 5/35
"	10	"	U 6/35
"	12	"	U 7/35
6	31	Mr. R. A. Copeland, Blackscull, Dromore, Co. Down	U 8/35
7	41	Mrs. H. G. Darley, Trory, Ballinamallard, Co. Fermanagh	U 10/35
"	42	"	U 11/35
10	60	Mr. T. Foote, Broughmore, Maze, Lisburn	U 12/35
11	62	Lieut.-Col. J. Galbraith, Clanabogan, Omagh	U 13/35
"	66	"	U 14/35
12	72	"	U 15/35
13	73	Mrs. E. Johnston, Craigboy, Donaghadee	U 16/35
14	81	"	U 17/35
14	82	"	U 18/35
"	83	"	U 19/35
15	86	Miss E. E. Kennedy, Tullyreagh, Glarryford, Co. Antrim	U 20/35
"	87	"	U 21/35
16	95	Mr. D. McCance, Knocknagoney, Strandtown, Belfast	U 22/35
17	97	Mr. G. McCormick, Brookend, Stewartstown, Co. Tyrone	U 23/35
"	99	"	U 24/35
18	105	Mr. W. McKelvey, Herdstown, Donaghadee, Co. Down	U 25/35
19	110	Mrs. A. Peel, Oakleigh, Roses Lane Ends, Ballinderry, Co. Antrim	U 26/35
"	111	"	U 27/35
"	112	"	U 28/35
"	114	"	U 29/35
20	117	Mr. F. W. Pelan, Sycamore Hill, Lambeg, Lisburn	U 30/35
24	139	Mrs. Stevenson, Dreemore, Dungannon, Co. Tyrone	U 31/35
25	148	Mr. J. C. Stewart, Balloo, Killinchy, Co. Down	U 32/35
"	149	"	U 33/35
26	152	Mr. J. Stuart, Killyflue, Ballymena, Co. Antrim	U 34/35
"	154	"	U 35/35
27	157	Mr. R. Tolerton, Holborn Hall, Plantation, Lisburn	U 36/35
28	163	Mr. T. Moffat, Purdyburn, Belfast	U 37/35
"	166	"	U 38/35
"	168	"	U 39/35
29	169	Mrs. J. Warnock, Tower View, Rathgael, Bangor, Co. Down	U 40/35
"	170	"	U 41/35
"	173	"	U 42/35
"	174	"	U 43/35
30	177	Mrs. H. L. Watson, Mount Nebo, Gilnahirk, Knock, Belfast	U 44/35

SECTION 2—WHITE LEGHORNS.

Pen No.	Test No. of Bird.	Name and Address of Owner.	Copper Ring No.
32	191	Mrs. E. R. Dunwoody, Benmore P.F., Islandmagee, Co. Antrim	U 45/35
"	192	" " " "	U 46/35
33	197	Mrs. H. M. Fletcher, Lisadian, Hillsborough, Co. Down	U 47/35
35	207	Mrs. W. Kirk, Springfield, Beragh, Co. Tyrone	U 48/35
37	218	Mrs. H. A. Montgomery, Carthall House, Coleraine, Co. Londonderry	U 49/35
38	223	Mr. F. W. Pelan, Sycamore Hill, Lambeg, Lisburn	U 50/35
39	232	Miss M. Tate, Danesford, Belcoo, Co. Fermanagh	U 51/35
40	239	Mrs. J. Warnock, Tower View, Rathgael, Bangor, Co. Down	U 52/35
42	247	Mr. J. Waugh, Ballyrickard, Kilwaughter, Larne, Co. Antrim	U 53/35
"	249	" " " "	U 54/35
"	251	" " " "	U 55/35
"	252	" " " "	U 56/35
44	260	Mr. T. J. McMillan, Crossgar, Co. Down	U 57/35
"	263	" " " "	U 58/35

SECTION 3—RHODE ISLAND REDS.

45	268	Agricultural & Horticultural College, Greenmount.	U 59/35
47	277	Reps. of the late Norah, Lady Dunleath, Shane's Castle, Co. Antrim	U 60/35
"	278	" " " "	U 61/35
49	294	Mrs. E. R. Dunwoody, Benmore P.F., Islandmagee, Co. Antrim.	U 62/35
50	297	Mrs. M. Finlay, Langfield, Armoy, Co. Antrim	U 63/35
"	300	" " " "	U 64/35
51	302	" " " "	U 65/35
"	304	" " " "	U 66/35
"	305	" " " "	U 67/35
52	309	Mrs. H. M. Fletcher, Lisadian, Hillsborough, Co. Down	U 68/35
53	317	Mr. F. Foote, Broughmore, Maze, Lisburn	U 69/35
"	318	" " " "	U 70/35
56	331	Mrs. G. Hegan, Spamount, Skerrygroom, Dungannon, Co. Tyrone	U 71/35
"	332	" " " "	U 72/35
"	334	" " " "	U 73/35
"	335	" " " "	U 74/35
57	337	" " " "	U 75/35
"	342	" " " "	U 76/35
58	344	Mrs. R. Abernethy, Cherry Hill, Stewartstown, Co. Tyrone	U 77/35
"	346	" " " "	U 78/35
"	347	" " " "	U 79/35
59	353	Miss E. E. Kennedy, Tullyreagh, Glarryford, Co. Antrim	U 80/35
60	355	Mrs. E. Kerr, The Manse, Upper Ballinderry, Co. Antrim	U 81/35
"	356	" " " "	U 82/35
"	357	" " " "	U 83/35
"	358	" " " "	U 84/35
61	361	Langford Lodge Poultry Farm, Crumlin, Co. Antrim	U 85/35
"	362	" " " "	U 86/35
"	364	" " " "	U 87/35
62	369	Mrs. J. Warnock, Tower View, Rathgael, Bangor, Co. Down	U 88/35
"	371	" " " "	U 89/35
"	372	" " " "	U 90/35

SECTION 3—RHODE ISLAND REDS—Contd.

Pen No.	Test No. of Bird.	Name and Address of Owner.	Copper Ring No.
64	379	Mr. Wm. McCullough, Carnalbanagh, Ballymena, Co. Antrim	U 91/35
"	380	" " " " " "	U 92/35
65	385	Mr. T. J. McMillan, Crossgar, Co. Down	U 93/35
66	393	Mr. H. A. Montgomery, Carthall House, Coleraine, Co. Londonderry	U 94/35
67	398	Mr. M. Scott, Crumlin, Co. Antrim	U 95/35
"	399	" " " " " "	U 96/35
68	403	" " " " " "	U 97/35
"	404	" " " " " "	U 98/35
"	406	" " " " " "	U 99/35
"	408	" " " " " "	U100/35
69	410	Mrs. M. Shields, Tamanyagan, Park, Co. Londonderry	U101/35
"	414	" " " " " "	U102/35
70	417	Mrs. Stevenson, Dreemore, Dungannon, Co. Tyrone	U103/35
"	418	" " " " " "	U104/35
"	419	" " " " " "	U105/35
"	420	" " " " " "	U106/35
71	424	Mr. J. Stuart, Killyflue, Ballymena, Co. Antrim	U107/35
72	428	Mr. J. E. Taylor, Ballyrobert, Craigavad, Co. Down	U108/35
73	435	Mr. S. Upton, Drumskill, Maze, Lisburn	U109/35

SECTION 4—ANY OTHER PURE BREED.

75	450	Mrs. F. R. Browne, Lakeview, Enniskillen, Co. Fermanagh	U110/35
76	451	Miss M. Crowe, Knappagh, Killylea, Co. Armagh	U111/35
80	477	Mrs. H. W. Merrick, Agivey House, Aghadowey, Co. Londonderry	U112/35
"	480	" " " " " "	U113/35
81	482	Mrs. J. W. Murland, J.P., Ardnabannon, Annsborough, Co. Down	U114/35
82	489	Mrs. S. B. Nangle, Ballyeglish, Moneymore, Co. Londonderry	U115/35
84	499	Mr. T. J. McMillan, Crossgar, Co. Down	U116/35
"	500	" " " " " "	U117/35
"	502	" " " " " "	U118/35
"	504	" " " " " "	U119/35
85	508	Mr. Wm. Sinclair, Holy Hill, Strabane, Co. Tyrone	U120/35

SECTION 5 (a)—WHITE WYANDOTTES (STATION-HOLDERS).

87	517	Mrs. J. Armstrong, Keeranbeg House, Donagh, Lisanaskea, Co. Fermanagh	U121/35
88	528	Mrs. J. C. Bell, Donaganie, Beragh, Co. Tyrone	U122/35
89	529	Miss A. Brown, Ballyhill, Crumlin, Co. Antrim	U123/35
"	533	" " " " " "	U124/35
90	538	Mrs. C. E. Croke, The Rocks, Blaney, Enniskillen, Co. Fermanagh	U125/35
91	544	Miss H. Knox, Templepatrick House, Donaghadee, Co. Down	U126/35
"	545	" " " " " "	U127/35

SECTION 5 (a)—WHITE WYANDOTTES (STATION-HOLDERS)—Contd.

Pen No.	Test No. of Bird.	Name and Address of Owner.	Copper Ring No.
92	550	Miss M. Lynch, Drumaneeny Farm, Eglinton, Co. Londonderry	U128/35
"	551	"	U129/35
93	553	Miss M. McAllister, Turnpike House, Dromore, Co. Down	U130/35
"	554	"	U131/35
"	556	"	U132/35
"	557	"	U133/35
95	565	Mrs. R. McCullough, Bruslee, Ballyclare, Co. Antrim	U134/35
"	566	"	U135/35
"	567	"	U136/35
"	569	"	U137/35
"	570	"	U138/35
96	571	Mrs. R. McDowell, Glenford, Glenoe, Larne, Co. Antrim	U139/35
"	575	"	U140/35
97	577	Mrs. H. McGrattan, Kintaugh, Portaferry, Co. Down	U141/35
97	580	"	U142/35
98	584	Mrs. W. Martin, Knockvale, Katesbridge, Co. Down	U143/35
"	587	"	U144/35
99	594	Mrs. O. O'Doherty, Dressogue, Drumquin, Co. Tyrone	U145/35
100	595	Mr. T. Ross, Portmuck, Islandmagee, Belfast	U146/35
"	597	"	U147/35
"	600	"	U148/35
101	604	Mrs. S. Todd, Ballymullen, Lisburn, Co. Antrim	U149/35
"	605	"	U150/35
102	608	Mrs. Veitch, Knockninny, Thompson's Bridge, Enniskillen, Co. Fermanagh	U151/35
"	610	"	U153/35
103	616	Miss E. L. Wilson, The Hill, Moneycree, Co. Armagh	U155/35
"	617	"	U156/35

SECTION 5 (b)—WHITE LEGHORNS (STATION-HOLDERS).

104	622	Mrs. J. Brown, Gorsebank, Culcrum, Cloughmills, Co. Antrim	U157/35
105	628	Miss E. Craig, Ballyboley Junction, Ballynure, Co. Antrim	U158/35
106*	631	Mrs. Wm. Crawford, Redergan, Beragh, Co. Tyrone	U159/35
"	632	"	U160/35
"	633	"	U161/35
"	634	"	U162/35
"	635	"	U163/35
107	639	Mrs. M. A. Donnelly, Kilmore House, Moy, Co. Armagh	U164/35
108	645	Mrs. R. Gillespie, Drumlister, Sixmilecross, Co. Tyrone	U165/35
"	648	"	U166/35
109	653	Miss I. Gilmer, Rashee, Ballyclare, Co. Antrim	U167/35
"	654	"	U168/35
110	655	Miss E. M. Irwin, Termeil House, Dungiven, Co. Londonderry	U169/35
112	668	Mrs. J. Knox, Shanmullagh, Ederney, Co. Fermanagh	U170/35
"	669	"	U171/35
"	671	"	U172/35
113	674	Mrs. M. Noble, Roundpark House, Killycramph, Lissanakea, Co. Fermanagh	U173/35
"	675	"	U174/35
"	676	"	U175/35
115	689	Mrs. J. Short, Tullyvalley, Seskinore, Omagh, Co. Tyrone	U176/35
116	693	Mrs. J. Stafford, Rahoney, Dromore, Co. Tyrone	U177/35
117	701	Miss M. Whyte, Derryboy, Crossgar, Co. Down	U178/35

* Purchased by Mr. T. J. McMillan, Crossgar.

SECTION 5 (c)—RHODE ISLAND REDS AND LIGHT SUSSEX (STATION-HOLDERS).

Pen No.	Test No. of Bird.	Name and Address of Owner.	Copper Ring No.
118	703	Mrs. M. D. Bell, Moneyhaw, Moneymore, Co. Derry	U179/35
"	705	" " " "	U180/35
120	715	Mrs. H. H. Dickson, Lower Coagh, Coagh, Co. Tyrone	U181/35
"	716	" " " "	U182/35
"	717	" " " "	U183/35
"	719	" " " "	U184/35
121	726	Mrs. M. J. Emerson, Cargagh House, Annacloy, Downpatrick, Co. Down	U185/35
122	729	Miss M. L. Fleming, Ballymenagh, Dungannon, Co. Tyrone	U186/35
123	737	Miss M. A. Gill, Rockmount, Saintfield, Co. Down	U187/35
124	739	Mrs. H. Kelly, Drumnafarn, Dungannon, Co. Tyrone	U188/35
"	744	" " " "	U189/35
125	746	Mrs. J. E. Lavery, Rosemount, Kilvergan, Lurgan, Co. Armagh	U190/35
126	752	Mrs. S. B. Lyons, Ballindreen, Coleraine, Co. London- derry	U191/35
"	753	" " " "	U192/35
"	755	" " " "	U193/35
"	756	" " " "	U194/35
128	763	Mrs. R. McGiffert, Rathcunningham, Toye, Belfast	U195/35
"	765	" " " "	U196/35
"	766	" " " "	U197/35
"	767	" " " "	U198/35
129	770	Mrs. J. A. McKee, Aughnagurgan, Lower Darkley, Co. Armagh	U199/35
"	771	" " " "	U200/35
130	776	Miss S. McKee, Ardmillan House, Killinchy, Co. Down	U201/35
"	777	" " " "	U202/35
"	778	" " " "	U203/35
"	779	" " " "	U204/35
131	782	Mrs. J. McMaster, Little Ballymena, Broughshane, Co. Antrim	U205/35
"	784	" " " "	U206/35
133*	795	Mrs. W. H. Nesbitt, Ballybannon, Annsborough, Co. Down	U207/35
"	796	" " " "	U208/35
"	797	" " " "	U209/35
"	798	" " " "	U210/35
135	805	Mrs. H. Rea, Lisowen, Crossgar, Co. Down	U211/35
"	808	" " " "	U212/35
"	810	" " " "	U213/35
137	817	Mrs. M. J. Stockdale, Ballynol, Downpatrick, Co. Down	U214/35
"	820	" " " "	U215/35
"	822	" " " "	U216/35
138	824	Miss A. M. Fulton, Ballykelly, Co. Londonderry	U217/35
"	827	" " " "	U218/35
139	829	Mrs. Wm. J. Watson, Woodbrook, Omagh, Co. Tyrone	U219/35
"	830	" " " "	U220/35
140†	839	Miss L. L. Connor, The Dairies, Drumeose, P.O., Enniskillen, Co. Fermanagh	U221/35

* Purchased by Mr. & Mrs. Farr, Ballyginney, Dundrum, Co. Down.

† " " Mr. S. A. Upton, Drumskill, Maze, Lisburn.

MINISTRY'S EGG LAYING TEST AT STORMONT, 1934/35.

FINAL RESULTS.

The above test ended on the 8th September, when the full period of 48 weeks was completed.

The following are particulars of the leading pens, but it should be noted that these figures are provisional and subject to amendment when the results are finally checked: the detailed particulars of all the pens, together with a statement of awards, etc., will be published in due course.

Section and Breed.	Position.	Pen No.	Name and Address of Owner.	Number of Eggs laid by Pen.			Value of Eggs.
				Super Grade	First Grade	2nd Grade	
1.—White Wyandottes.	1	2	Mrs. R. J. Beck, Cleigh, Corbet, Banbridge, Co. Down	810	523	50	£7 0 9
	2	14	Mrs. E. Johnston, Rathgael, Bangor, Co. Down	665	620	44	6 9 9
	3	19	Mrs. A. Peel, Oakleigh, Roses Lane Ends, Ballinderry, Co. Antrim	945	287	10	6 7 4
2.—White Leghorns	1	42	Mr. J. Waugh, Ballyrickard, Kilwaughter, Co. Antrim	525	734	135	£6 9 4
	2	44	Mr. T. J. McMillan, Crossgar, Co. Down	312	759	256	5 14 6
	3	40	Mrs. J. Warnock, Tower View, Rathgael, Bangor, Co. Down	581	495	135	5 11 0
3.—Rhode Island Reds.	1	62	Mrs. J. Warnock, Tower View, Rathgael, Bangor, Co. Down	452	731	289	£6 11 1
	2	58	Mrs. R. A. Abernethy, Cherry Hill, Stewartstown, Co. Tyrone	914	353	36	6 9 8
	3	69	Miss M. Shields, Tamanyagan, Park, Co. Derry	420	833	130	6 8 6
4.—Any other Pure Breed	1	80	Mrs. H. W. Merrick, Agivey House, Aghadowey, Co. Derry.	736	330	12	£5 5 7
	2	82	Mrs. S. B. Nangle, Ballyeglish, Moneymore, Co. Derry	404	560	195	5 3 10
	3	81	Mrs. J. W. Murland, J.P., Ardnabannon, Annsborough, Co. Down. (All Light Sussex.)	344	576	151	4 15 11

Section and Breed.	Position.	Pen No.	Name and Address of Owner.	Number of Eggs laid by Pen.			Value of Eggs.
				Super Grade	First Grade	2nd Grade	
5 (a).—Station-holders' White Wyandottes.	1	93	Miss M. McAllister, Turnpike House, Backnamullagh, Dromore, Co. Down.	1,180	56	5	£6 17 5
	2	95	Mrs. R. McCullough, Bruslee, Ballyclare, Co. Antrim	567	626	102	6 10 5
	3	103	Miss E. L. Wilson, The Hill, Moneycree, Armagh	444	778	97	6 3 0
5 (b).—Station-holders' White Leghorns.	1	106	Mrs. W. Crawford, Redergan, Beragh, Co. Tyrone.	968	368	44	£6 16 5
	2	112	Mrs. J. Knox, Shanmullagh, Ederney, Co. Fermanagh.	426	672	164	5 18 7
	3	113	Mrs. M. Noble, Roundpark House, Killycramph, Lisnaskea, Co. Fermanagh.	799	384	51	5 16 6
5 (c).—Station-holders' Rhode Island Reds.	1	120	Mrs. H. H. Dickson, Lower Coagh, Coagh, Co. Tyrone.	964	213	234	£6 14 6
	2	126	Mrs. J. B. Lyons, Ballindreen, Coleraine, Co. Derry.	816	447	43	6 12 10
	3	130	Miss S. McKee, Ardmillan House, Killinchy, Co. Down.	665	579	63	6 6 2

The leading pen in Section 1, namely, that owned by Mrs. Beck, Cleigh, Corbet, Banbridge, is the first pen in the entire test, while the leading pen in Section 5 (a) is second. Thus once again the White Wyandottes have secured the two premier places in the test.

The number of birds which died during the entire test period was 90, which represents a mortality rate of 11.03 per cent. The corresponding percentage in respect of the previous test was 13.37.

The percentage rates of mortality in respect of (a) the pullets in the different Sections and (b) the pullets of the principal breeds represented, were as follows :—

Section.	% Mortality.	Breed.	% Mortality.
1	9.2	White Wyandottes	8.7
2	11.9	White Leghorns	18.4
3	9.5	Rhode Island Reds	9.3
4	10.2		
5 (a)	7.8	Light Sussex	4.5
5 (b)	25.0		
5 (c)	8.7		

The next test will commence on the 5th October, 1935.

PRICES OF FEEDING STUFFS.

The following table shows the average retail prices per cwt. of Feeding Stuffs at 1st September, 1935, with comparative figures for the corresponding date in 1934.

	1935.				1934.			
	Price per cwt.	Protein equivalent	Price per unit of protein equivalent	Starch equivalent	Price per unit of starch equivalent	Protein equivalent	Price per unit of protein equivalent	Starch equivalent
STARCHY FOODS—								
Maize (whole)	s. 4 8	6.8	s. 13 9	81.5	s. 1 2	6.8	s. 20 4	81.5
Maize Meal	5 1	6.8	14 11	81.5	1 3	6.8	21 1	81.5
Bran, Red	6 10	10.0	13 8	45.3	3 0	10.0	15 4	45.3
Bran, White	7 10	10.0	15 8	45.3	3 5	10.0	17 4	45.3
Pollard, Brown	7 2	11.0	13 0	71.2	2 0	11.0	14 3	71.2
Pollard, White	7 11	11.0	14 5	71.2	2 3	11.0	15 4	71.2
Barley Meal	7 5	6.2	23 11	69.7	2 2	6.2	28 3	69.7
Oats	7 8	7.6	20 2	60.0	2 7	7.6	16 0	60.0
PROTEIN FOODS—								
Linseed Cake, home-made	10 1	25.0	8 1	71.8	2 10	25.0	8 6	71.8
Linseed Cake, foreign	9 1	25.0	7 3	71.8	2 6	25.0	7 10	71.8
Linseed Cake Meal	9 5	25.0	7 6	72.8	2 7	25.0	8 0	72.8
Cotton Cake, decorticated	9 1	35.0	5 2	71.2	2 7	35.0	5 2	71.2
Cotton Cake, undercorticated	6 0	17.0	4 1	39.2	3 1	17.0	8 3	39.2
Earth Nut Cake, decorticated	8 7	41.0	7 2	73.0	2 4	41.0	4 2	73.0
Earth Nut Cake, undercorticated	8 0	27.0	5 11	57.0	2 10	27.0	4 10	57.0
Soya Bean Meal, (extracted)	8 8	38.0	4 7	64.0	2 2	38.0	4 7	64.0
Bean Meal	7 3	20.0	7 3	66.0	2 2	20.0	10 0	66.0
Fish Meal (60% protein)	16 3	53.0	6 2	58.9	5 6	53.0	6 5	58.9
Meat and Bone Meal (40% Protein)	9 6	36.2	5 3	44.0	4 4	36.2	5 6	44.0
Meat and Bone Meal (60% protein)	14 1	54.9	5 2	61.3	4 7	54.9	5 2	61.3
OTHER FEEDING STUFFS—								
Linseed, whole	15 1	19.0	15 11	119.2	2 6	19.0	16 7	119.2
Palm Nut Cake	7 10	17.0	9 3	70.2	2 3	17.0	9 6	70.2
Palm Nut Meal	8 1	17.0	9 6	78.0	2 1	17.0	9 7	78.0
Potatoes	3 10	0.6	127 9	18.0	4 3	0.6	125 0	18.0
Oat Straw	1 8	0.9	37 0	20.0	1 8	0.9	32 10	20.0
Meadow Hay	1 8	4.6	7 3	37.0	0 11	4.6	7 11	37.0

One of the objects of the foregoing table is to guide farmers in the economic purchase of feeding stuffs.

Ignoring their mineral content, the valuable constituents of any feeding stuff, whether home-grown or purchased, consist of :—

- (1) Carbohydrates—a group of substances which include materials such as starch, sugar, etc. They supply heat or energy to the animal, and the surplus is stored by the animal as fat.
- (2) Oil—which also provides heat or energy, the surplus being stored as fat. For this purpose oil is approximately $2\frac{1}{2}$ times as valuable as the carbohydrates, but its presence in the ration in excessive quantities may lower the digestibility of the ration and cause digestive troubles.
- (3) Protein—The group of bodies termed protein or albuminoids contain nitrogen. Protein is the only ingredient of a feeding stuff which can produce flesh or muscle and hence its special importance.

All animals require a certain amount of each of the above constituents, but the relative amounts depend upon the class of stock. Thus, for example, a two-year-old fattening bullock requires a relatively small amount of protein (flesh forming material). Its ration should consist mainly of foods rich in carbohydrates, i.e., fat producing substances. On the other hand, a dairy cow is producing milk, which is a substance rich in protein, and as the protein, that is flesh forming material in milk, can only be derived from the protein in the food, the ration for the dairy cow must contain considerably more protein than that for the fattening bullock.

There are very wide differences in the composition of feeding stuffs both home grown and purchased. Some, such as oats and maize, are rich in carbohydrates and, therefore, particularly valuable for fattening purposes, whilst others, such as decorticated cotton cake, earthenut cake and linseed cake, are rich in protein, and are chiefly valuable for their flesh and milk-producing properties.

In the following table the composition of some of the more commonly used feeding stuffs is shown :—

PERCENTAGE COMPOSITION.

	Water.	Protein.	Oil.	Carbohydrates.
Turnips (Swede)	88	1	0.2	9
Potatoes	75	2	0.1	21
Oat Straw	14	4	2	37
Meadow Hay	10	10	3	45
Pasture Grass	80	3.5	0.8	10
Cabbage	89	1.5	0.5	8
Fattening Foods—				
Oats	13	9	6	60
Maize Meal	12	10	4	70
Barley Meal	13	12	2	66
Flesh Forming Foods—				
Linseed Cake	11	30	10	35
Decorticated Cotton Cake	9	40	9	26

The farmer frequently asks what is the cheapest feeding stuff to buy. It is, however, often very difficult to give a direct answer. Much depends upon what the feeding stuff is required for, whether for fattening or milk production. Again, maize and oats are essentially fattening foods whilst decorticated cotton cake is a flesh-forming food, and it would be just as futile to use the cost per ton to compare their values as it would be to use the cost per ton to compare the values of, say, sulphate of ammonia and superphosphate.

Foods of similar composition can, however, be compared, and it is possible for the enterprising farmer to effect considerable economies, not only in the use of home grown feeding stuffs, but particularly in the purchase of concentrated feeding stuffs, by studying the market prices.

The starch equivalent figure is a measure of the energy, heat or fat producing value of the feeding stuff, and shows the number of pounds of starch which would be required to give the same heat or energy as 100 lb. of the feeding stuff. For example, the table on page 39 states that the starch equivalent of maize meal is $81\frac{1}{2}$, or, in other words, 100 lb. of maize meal will provide as much heat or energy as $81\frac{1}{2}$ lb. of pure starch.

The protein equivalent figure shows the number of pounds of digestible flesh or muscle producing material in 100 lb. of each of the feeding stuffs listed.

Statement showing the Shipments of Live Stock from Northern Ireland Ports during the month ended 31st August, 1935, and the eight months ended 31st August, 1935, and the corresponding figures for 1934.

PORTS OF :—	CATTLE.					SHEEP.					PIGS.			Horses
	Fat	Stores	Milch Cows	Springers	Calves	Total	Fat	Stores	Lambs	Total	Fat	Stores	Total	
Belinst	4,686	3,736	1,945	400	—	10,167	—	—	15,004	15,004	6,041	62	6,103	283
Larne	10	495	—	22	3	530	—	—	3,513	3,513	1,741	60	1,801	44
Londonderry ..	245	2,825	72	161	132	3,435	—	—	6,352	6,352	215	—	215	4
Newry	31	101	—	—	—	132	—	—	463	463	—	—	—	—
Total, August, 1935	4,372	7,157	2,017	583	135	14,264	—	—	25,332	25,332	7,997	122	8,119	331
Total, August, 1934	3,365	11,815	2,127	608	307	18,222	10	124	22,898	23,032	7,934	160	8,094	373
Total Eight months ended 31st August, 1935	47,926	130,018	10,829	2,322	15,422	206,517	13,336	—	92,259	105,595	56,650	2,360	59,010	4,094
Total, Eight months ended 31st August, 1934	36,345	98,381	10,602	2,679	10,639	158,646	10,412	125	93,357	103,894	46,329	2,879	49,208	3,817

IMPORTS AND EXPORTS.

Table showing the Imports and Exports through Northern Ireland ports of certain Agricultural Products during the month ended 31st July, 1935, and the seven months ended 31st July, 1935, with comparative figures for the corresponding periods in 1934.

(These figures are supplied through the courtesy of the Ministry of Commerce and are subject to revision.)

Commodity.	IMPORTS.				EXPORTS.			
	Month ended 31st July.		Seven months ended 31st July.		Month ended 31st July.		Seven months ended 31st July.	
	1935	1934	1935	1934	1935	1934	1935	1934
Bacon cwt.	1,667	2,512	20,126	23,690	18,858	11,315	120,938	93,255
Hams „	1,142	938	5,210	4,718	8,284	8,695	73,844	62,705
Pork „	—	—	6	582	2,116	2,268	26,027	19,096
Butter „	3,128	7,084	92,594	97,376	1,453	851	3,253	2,757
Eggs gt. hds.	2,898	4,221	41,008	37,737	311,151	316,496	2,268,441	2,222,394
Oat Products (including Oat- meal) cwt.	2,347	1,573	12,365	16,265	3,293	2,596	53,888	27,539
Potatoes tons	25	81	148	265	7,295	3,217	95,449	96,792
Poultry cwt.	11	8	151	53	7,180	5,603	100,741	97,630
Grassseeds „	429	890	33,833	20,364	1,745	4,081	219,247	165,704

During the month of July, 1935, there were 11,430 cwts. of oats imported through Northern Ireland ports direct from abroad, as compared with 8,857 cwts. during the corresponding month last year.

PRICES OF FAT STOCK.

The following are the average prices per live cwt. of bullocks and heifers, sold at Belfast Auction Marts during each of the four weeks ended 27th August, 1935 :—

Week Ended.	Bullocks.			Heifers.	
	s.	d.		s.	d.
6th August ..	31	0	..	31	6
13th August ..	31	0	..	31	9
20th August ..	30	3	..	30	0
27th August ..	30	6	..	30	6

Table showing the number of Live Stock (1) exposed for sale and (2) sold at 20 fairs in Northern Ireland during the months of August, 1934, and July and August, 1935.

Description of Live Stock.	August, 1934.		July, 1935.		August, 1935.	
	Number exposed for sale.	Number sold.	Number exposed for sale.	Number sold.	Number exposed for sale.	Number sold.
Store Cattle ..	7,999	6,014	7,369	5,609	8,196	4,581
Fat Cattle ..	297	270	933	836	1,100	942
Dairy Cattle ..	1,717	1,311	1,116	888	1,706	1,252
Sheep ..	816	565	539	360	612	407
Lambs ..	2,749	2,269	2,102	1,749	3,944	2,840
Young Pigs ..	2,922	2,264	3,064	2,266	3,340	2,805

The offerings in all sections at fairs held during August were larger than in July and on the whole trade was quieter. An increased number of store cattle experienced a very slow trade and prices showed an all-round reduction. Only strong polly bullocks in forward condition and best quality heifers suitable for breeding attracted buyers at slightly easier rates. Other descriptions, however, were difficult to cash at lower prices and a considerable number were left unsold. Fat cattle were shown in larger number but here again trade was of a quiet nature and prices were easier. There was a larger number of dairy cattle and for best quality a better demand ruled. Nice uddered cows were dearer on the month, whilst good springing heifers also made firmer rates. The chief attractions in the sheep sales at fairs were good ewes for breeding purposes and lambs for feeding but in other respects trade was of a sluggish nature. In most instances prices were cheaper on the month. The brightest feature in the live stock end was the improvement in the demand for young pigs during August, and a larger volume of business was transacted than in July at higher prices.

11th September, 1935.

**GOVERNMENT OF NORTHERN IRELAND.
MINISTRY OF AGRICULTURE.**

List of Ministry's Leaflets and other Publications.

- | | |
|---|---|
| <p>No. 1. Flax Seed, 1935.
 " 2. Improvement of Farm Poultry.
 " 3. Feeding for Egg Production.
 " 4. Marketing of Eggs.
 " 5. The Dishorning of Calves.
 " 6. The Packing of Apples in Standard Boxes.
 " 7. Potato Variety Trials.
 " 8. Seed Testing for Farmers.
 " 9. The Renovation of Orchards.
 " 10. Fruit Tree Pests—Capcid Bugs.
 " 11. Fruit Tree Pests—Aphides and Apple Sucker.
 " 12. Fruit Tree Pests—Caterpillars.
 " 13. Contagious Abortion in Cattle.
 " 14. Cheese-making on the Farm.
 " 15. Suitable Varieties of Fruit.
 " 16. The Feeding of Dairy Cows.
 " 17. Home Bottling of Fruits and Vegetables
 " 18. Marketing of Dead Poultry.
 " 19. How to Feed Linseed.
 " 20. The Hatching and Rearing of Chickens.
 " 21. The Uses and Advantages of Portable Poultry Houses.
 " 22. Leather-Jacket Grubs.
 " 23. The Handling and Care of Wool.
 " 24. Fluke in Sheep.
 " 25. The Rearing and Management of Young Horses.
 " 26. Ordnance Survey Maps for Farmers
 " 27. How to Keep Eggs Clean.
 " 28. The Construction of a Laying House for Poultry.
 " 29. The Selection and Breeding of Laying Hens.
 " 31. Coccidiosis in Poultry.
 " 32. Roup of Poultry (Fowl Pox).
 " 33. Spraying Calendar for Apple Orchards.
 " 34. The Pruning of Apple Trees.
 " 35. The Fattening of Pigs.
 " 36. Advantages of Milk Recording.
 " 37. The Raising and Fattening of Turkeys.
 " 38. The Destruction of Charlock.
 " 39. The Production of Clean Milk.
 " 40. The Laying Down and Management of Temporary Pastures.
 " 41. Blackleg, Blackquarter or Quarterill.
 " 42. The Purchase of Balanced Rations for Dairy Cows.</p> | <p>No. 43. Tuberculosis in Poultry.
 " 44. Results of Crop Experiments.
 " 45. The Breeding and Rearing of Pigs.
 " 46. Hints for Winter Egg Production.
 " 47. The Care and Management of Sheep.
 " 48. Baby Beef Production.
 " 49. American Gooseberry Mildew.
 " 50. Potato Blight.
 " 51. Butter-making on the Farm.
 " 52. Gapes in Chickens.
 " 54. The Breeding and Rearing of Calves.
 " 55. Destruction of Ragwort or Benweed.
 " 56. Identification of Egg Supplies.
 " 57. How to have Eggs of First Quality.
 " 58. How the Fertilisers and Feeding Stuffs Act benefits the farmer.
 " 59. Bacillary White Diarrhoea.
 " 60. Advantages of Winter Agricultural Classes.
 " 61. The Care and Management of Breeding Bulls.
 " 62. The Production of Timber on the Farm.
 " 63. Sheep—Castration, Docking, Foot-Rot and Care of Feet.
 " 64. The Destruction of Warble Fly Maggots in Cattle.
 " 65. The Packing of Apples in Barrels.
 " 66. Seed Testing Facilities for Traders.
 " 67. The Cultivation of Vegetables.
 " 68. The Cultivation of Strawberries
 " 69. The Construction of Piggeries.
 " 70. Ringworm.
 " 71. The Cultivation of Raspberries.
 " 72. Tree Planting for Shelter and Ornament.
 " 73. The Propagation and Maintenance of Healthy Stocks of Potatoes.
 " 74. New Pure Strains of Flax.
 " 75. Pig Production and the Pigs Marketing Scheme.
 " 76. Acarine (Isle of Wight) Disease of Bees.
 " 77. Licensing of Milk Producers and Distributors.
 " 78. Graded Milk.
 " 79. The Picking and Storing of Apples.
 " 80. Hoose or Husk in Farm Stock.
 " 81. The Construction of Cow Houses.
 " 82. White Scour in Calves.</p> |
|---|---|

Any of the above leaflets may be obtained free of charge and post free on application to the Secretary, Ministry of Agriculture, Stormont, Belfast.

CIRCULARS.

- No. 1. Phosphatic Fertilisers.
" 5. Why Pay a Tax on the Horns of Cattle?
" 8. Basic Slag.
" 9. Smut in Oats.
" 10. Purchase of Fertilisers and Feeding Stuffs.
" 11. Fertilisers and Feeding Stuffs Act—General Summary.
" 12. The treatment of Liver Fluke.
" 306. Fertilisers and Feeding Stuffs Act, 1926—Revision of Regulations.

MISCELLANEOUS PUBLICATIONS.

Store Cattle.
Reports on Egg-Laying Tests.
Crop Insurance.
List of Growers of Certified Crops of Immune Varieties of Potatoes.
List of Growers of Certified Crops of Non-Immune Varieties of Potatoes.
The Ministry's Monthly Report.
Register of Premium Stallions.
Guide to the Live Stock Breeding Act (Northern Ireland), 1922.
Guide to the Marketing of Fruit Act (Northern Ireland) 1932.

Any of the above publications may be obtained free of charge and post free on application to the Secretary, Ministry of Agriculture, Stormont, Belfast.

The following publications can be obtained from His Majesty's Stationery Office, 80 Chichester Street, Belfast, at the prices stated:—

- (1) The Annual Report of the Ministry of Agriculture for Northern Ireland. Price 2/6 net.
(2) Annual Report upon the Agricultural Statistics of Northern Ireland. Price 2/- net.
(3) The Journal of the Ministry of Agriculture for Northern Ireland. Price 2/6 net.
(4) The Agricultural Output of Northern Ireland. 1925. Price 2/6 net.

